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EXAMINER

HARPER, VINCENT P

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 8

Application Number: 09/881,441
Filing Date: June 14, 2001
Appellant(s): KEANE ET AL.

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For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 10/30/2002.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the real party in interest is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

No amendment after final has been filed.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 1-23 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

A substantially correct copy of appealed claims 1-23 appears on pages 12-17 of the Appendix to the appellant's brief. The minor errors are as follows: on page 13, line 3 of claim 11, "as" should be replaced by --at--.

(9) Prior Art of Record

6,330,428	Lewis et al.	12-2001
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6,275,797	Radic	8-2001
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Petitcolas, F. A. "Information Hiding--A Survey" Proceedings of the IEEE, vol87, no. 7, (July 1999), pp. 1062-1078

Tschudn, C. F. "Header hopping and packet mixers" Proceedings of the Ninth International Conference on Computer Communications and Networks, 2000 (Oct. 16-18, 2000), pp. 316-319

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in-
 - (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
 - (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

1. Claim 11 rejected under 35 U.S.C. 102(e) as being anticipated by Lewis et al. (U.S. Patent 6,330,428), hereinafter referred to as Lewis.

Regarding claim 11, Lewis discloses an evaluation system that works with a test voice signal consisting of a plurality of different voice samples (column 3, lines 2-3; column 3, lines 18-21) being sent over a packet-based communications system (Fig. 1B) resulting in a modified voice signal that is compared with the original test voice signal (col. 3, lines 1-7), which corresponds to “a signal for a voice call provided over a

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packet-based communications network, said signal comprising a plurality of packets at least one of which comprise test voice information for comparison at a node with stored test voice information which is the same as the test voice information.”

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 7, 8, 14, 16, 17, 18, 19, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis in view of Tschudin (“Header hopping and packet mixers,” Ninth Conference on Computer Communications and Networks, 2000. Proceedings, Oct. 2000).

Regarding claims 1, Lewis discloses a voice quality performance evaluator and method of operation in conjunction with a packet based communication network (column 1, line 26-27). Lewis’s system comprises: a first and second voice terminal connected to separate nodes on a packet data network (Fig. 1B); a node in a packet network receiving the original voice sample (column 3, lines 1-3), which corresponds to

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“(i) receiving packets for the voice call ”; a transmission path to the second node (column 3, line 2-3), which corresponds to “(ii) forwarding the packets to the second node”; processing circuitry that receives the modified voice sample via the interface from the voice transmission path under test and compares the original voice sample to the modified voice sample to evaluate the quality of the transmission path (column 3, lines 3-8), which corresponds to “(iii) at the second node, accessing the stored test voice information at the second node and comparing it with the test voice information received in the packets using a speech quality assessment algorithm in order to obtain a measure of speech quality for the voice call.” However, Lewis fails to specifically disclose “adding at least part of the stored test voice information to at least some of the packets.” However, the examiner contends that the concept of mixing signals such as normal voice and voice test signals was well known in the art, as taught by Tschudin.

Tschudin describes a steganographic protocol for packet switched networks where hidden information can be added to normal messages (abstract).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lewis to allow testing and normal voice communication to proceed simultaneously by the use of steganographic techniques, for the purpose of having an ongoing evaluation of speech quality.

Regarding claim 3, Lewis in view of Tschudin disclose everything claimed as applied above (see claim 1), in addition, Lewis describes the use of voice communications over packet data networks such as the Internet (column 1, lines 26-28),

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which corresponds to "said packet-based communications network is an internet protocol communications network."

Regarding claim 7, Lewis in view of Tschudin disclose everything claimed as applied above (see claim 1), in addition, Tschudin teaches the use of a tags in packets to identify packets that contain valid data (pg 316, introduction, paragraph two), which corresponds to "identifying which of the packets comprise test voice information by determining whether a pre-specified identifier is present in a header of each of the packets."

Regarding claim 8, Lewis in view of Tschudin disclose everything claimed as applied above (see claim 7), in addition, Tschudin teaches the use of a tags in packets to let only the intended receiver recognize the packets that contain valid data (pg 316, introduction, second paragraph), which corresponds to "forwarded from the first node to the second node via one or more other nodes which do not have access to information about the pre-specified identifier."

Regarding claim 14, Lewis discloses a packet-based system capable of measuring speech quality (Fig. 1B). In addition, Lewis's system includes: a node for receiving voice (158), which corresponds to "(i) an input arranged to receive packets for the voice call; processing circuitry for retrieving voice samples that will eventually be coded and transmitted on the network (column 6, lines 38-47, Fig. 2, (202), which corresponds to "(ii) a processor arranged to add test voice information to one or more of the packets; an output (304) that directs data over a packet switched network (302) to a destination (312); which corresponds to an output arranged to forward the packets

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towards the called party. However, Lewis fails to specifically disclose the use of the system during an ongoing voice call between two parties. However, the examiner contends that the concept of mixing signals such as normal voice and voice test signals was well known in the art, as taught by Tschudin.

Tschudin describes a steganographic protocol for packet switched networks where hidden information can be added to normal messages (abstract).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lewis to allow testing and normal voice communication to proceed simultaneously by the use of steganographic techniques, as taught by Tschudin, for the purpose of having an ongoing evaluation of speech quality.

In addition, Lewis teaches the comparison of an original voice sample with a modified sample to evaluate the performance of the voice transmission path (col. 3, lines 3-8), which corresponds to "for comparison of the test voice information with the stored test voice information of the called party to provide a measure of said speech quality."

Regarding claims 19 and 20, claims 19 and 20 are rejected for the same reasons given above in claim 14; in addition, Lewis teaches the transmission of test data over a communications network where the receiving node performs a performance evaluation (col. 2, line 60 – col. 3, line 8), which corresponds to "(iv) at the called party node extracting the received test voice information and comparing it with stored test voice information at said called party node to provide a measure of said speech quality."

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Regarding claims 16, 18, and 21, they are interpreted and rejected for the same reasons as set forth above in the rejection of claims 1 and 14. In addition, Lewis teaches the use of an input decoder (312) for receiving packets from a packet-based communications network, which corresponds to "an input arranged to receive packets"; stored original samples at the point of evaluation (402), which corresponds to "stored test voice information at the node"; and processing circuitry (202) that performs a comparison and a speech quality evaluation (Fig. 4), which corresponds to "a processor arranged to compare the received test voice information and the stored test voice information using a speech quality assessment algorithm in order to obtain a measure of speech quality for the voice call."

Regarding claim 17, the limitations given here are the same as those given in claims 14 and 16 and are rejected for the same reasons.

3. Claims 4, 9, 10, 22, and 23, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis in view of Tschudin, and further in view of well known prior art (MPEP 2144.03).

Regarding claim 4, Lewis in view of Tschudin disclose everything as applied above (see claim 1). However, Lewis in view of Tschudin do not specifically teach the use of real-time protocol packets. However, the examiner takes official notice of the fact that the use of real-time transport protocol for the transmission of sounds over an IP network was well known in the art.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lewis in view of Tschudin by using the real-time transport protocol when exchanging real-time data such as sounds between nodes in a network so as to adhere to a standard protocol.

Regarding claim 9, Lewis in view of Tschudin disclose everything claimed as applied above (see claim 1); Lewis's Fig. 3 and the summary of the invention (column 2, lines 61-67, column 3 lines 1-11) suggest that the sending and receiving nodes could be located at separate locations; however, Lewis in view of Tschudin do not explicitly state that the first and second nodes are located at the edge of the network. However, the examiner takes official notice of the fact that the separation of the nodes for the purpose of testing was well known in the art.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lewis in view of Tschudin by duplicating the voice quality performance evaluator and locating separate evaluators at distance locations across a network, as an alternative way of determining voice quality between points on the network.

Regarding claim 10, Lewis in view of Tschudin disclose everything as applied above (see claim 1). However, Lewis in view of Tschudin do not specifically teach the use of the PESQ algorithm for speech quality assessment. However, the examiner takes official notice of the fact that the use of the PESQ algorithm for the evaluation of speech quality was well known in the art.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lewis in view of Tschudin by using the PESQ algorithm to evaluate speech quality so as to use a widely accepted standard for evaluating speech quality.

Regarding claims 22 and 23, Lewis in view of Tschudin disclose everything as applied above (see claim 21 and 20, respectively). However, Lewis in view of Tschudin do not specifically teach the storage of a computer program on a computer readable medium. However, the examiner takes official notice of the fact that the use of computer readable medium was well known in the art.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lewis in view of Tschudin by storing the computer program on computer readable medium for the purpose of loading the program as needed.

4. Claims 2, 5, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis in view of Tschudin and further in view of Petitcolas et. al., ("Information Hiding—A Survey" Proceedings of the IEEE, Vol. 87, No. 7, July 1999), hereinafter referred to as Petitcolas.

Regarding claims 2, 5, and 15, Lewis in view of Tschudin disclose everything claimed as applied above (see claims 1 and 14, respectively); however Lewis in view of Tschudin do not specifically describe the identification of voice packets where speech is absent and the adding of voice test information to those packets. However, the

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examiner contends that the concept of identifying packets where speech is absent is consistent with the technique of identifying residual bandwidth for the purpose of storing hidden information there, as taught by Petitcolas.

Petitcolas teaches the use of suitable coding techniques to exploit residual bandwidth (pg. 1067, section D).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lewis in view of Tschudin by using the residual bandwidth available in packets where speech is absent, as an efficient technique for combining signals.

Regarding claim 5, Lewis in view of Tschudin and further in view of Petitcolas disclose everything as applied above (see claim 2). In addition, Tschudin teaches the modification of packet headers of the packets that contain hidden information (abstract, and the first and second paragraphs of the introduction), which corresponds to "making an indication in a header of each of those packets to which test voice information is added."

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis in view of Tschudin and Petitcolas, and further in view of well known prior art (MPEP 2144.03).

Regarding claim 6, Lewis in view of Tschudin and Petitcolas disclose everything as applied above (see claim 5). In addition, Tschudin teaches the hiding of information in a packet header (pg 316, first paragraph of the introduction), which reads "said

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indication is a payload value." However, Lewis in view of Tschudin and Petitcolas do not specifically teach the use of real-time transport protocol packets. However, the examiner takes official notice of the fact that the use of real-time transport protocol for the transmission of sounds over an IP network was well known in the art.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lewis in view of Tschudin and Petitcolas, by using the real-time transport protocol when exchanging real-time data such as sounds between nodes in a network so as to adhere to a standard protocol.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis in view of Tschudin and of Petitcolas.

Regarding claim 12, Lewis discloses everything claimed as applied above (see claim 11), in addition, it is rejected for the same reasons given above for claims 1 and 2.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis in view of well known prior art (MPEP 2144.03).

Regarding claim 13, Lewis discloses everything as applied above (see claim 11), in addition, it is rejected for the same reasons given above for claim 4.

(11) Response to Argument

8. Applicant's arguments filed on 10/30/2002 have been fully considered but they are not persuasive.

9. Applicant asserts on page 5:

Claim 11 under U.S.C. §102 as allegedly being anticipated by Lewis et al. 6,330,428.

As explained in the response of July 10, 2002, Lewis does not teach providing each node or terminal with the same stored test voice information and sending test data and voice data embedded together on the same call.

Lewis teaches the use of two voice terminals (158) (154) (Fig. 1B) each connected as a node to a packet data network (156). A voice sample from one terminal is transmitted over the network and received at the second terminal where a comparison is made in a voice quality performance evaluator with a copy of the original voice sample (col. 2, line 61 – col. 3, line, 7). The voice quality performance evaluator (152) has discrete components for transmission, storage and evaluation (Fig. 3). In this case, it would have been well known in the art to make these components separable (In re Dulberg, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961)) and to duplicate this functionality at different nodes throughout the network (In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960)).

10. Applicant further asserts on page 5:

Lewis teaches a system which sends voice and test data on different calls. This means it is likely *that the voice and test data do not travel the same way* and as such do not suffer the same impacts from the network. There is no stored test voice information at each node/terminal in the network. As such Lewis cannot give an accurate measure of the speech quality of a specific call in the network and suffers from many of the drawbacks identified in the introduction of the present application. (Italics added)

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the voice and test data travel the same path and there is stored test information at **each** node/terminal of the network) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

11. Applicant asserts on page 6:

The Examiner argues that the test voice signal of Lewis (column 3, lines 2-3; column 3, lines 18-21) is a signal for a voice call as claimed in claim 11. This is not the case. The test voice signal of Lewis is independent of and separate from an actual voice call. For example, Lewis explains that a voice sample from memory is used (column 3, line 1) which would not be the case for an *actual live voice call*. The test voice signal of Lewis does not comprise any actual speech signals for a communication session between a calling and a called party as is the case is a voice call. For example, column 6 lines 8 to 18 of Lewis explain how the voice samples are taken from 20 speakers and stored. (Italics added)

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., actual live voice call) is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In this case Lewis uses a voice sample (column 3, lines 2-3), which corresponds to the Applicant's "voice call."

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12. Applicant asserts on page 6:

Claims 1 3 7 8 14, 16, 17, 18, 19 20 and 21 as allegedly being unpatentable over Lewis in view of Tschudin.

Regarding independent claim 1, the Examiner argues that Lewis discloses all the features of this claim except for "adding at least part of the stored test voice information to at least some of the packets". The Examiner then goes on to argue that this feature is taught in Tschudin. Both these arguments are respectfully traversed.

As explained above, Lewis does not teach providing each node or terminal with the same stored test voice information and sending test data and voice data embedded together on the same line voice call. In contrast, Lewis uses a dedicated test call.

With regards to "each node," see §10 above. In addition, Lewis teaches the use of a voice quality performance evaluator where voice samples are sent over a transmission path and compared with an original voice sample stored in a evaluation unit (abstract, col. 2 line 61-col. 3, line 6). Tschudin teaches the mixing of unrelated packets with tagged data (p. 316, "Introduction"). Lewis in combination with Tschudin teach a system where voice and test data are sent together over the network; and hence, the voice and test data both experience the same impact.

13. Applicant further asserts on page 6:

The Examiner states that the first and second nodes of claim 1 read onto the voice terminals 154, 158 of Lewis' Figure 1 B. However *these nodes do not each comprise the same stored test voice information* as specified in claim 1. As described in Lewis column 5 lines 6 to 22 and column lines 50 to 62, it is the VQPE which stores the test voice samples and which carries out the comparison. The mobile unit 104 codes the test voice samples, transmits them to the wireless network 110, receives them back from the wireless network 110, decodes them, and sends them back to the VQPE. Only the VQPE stores the test voice samples. (Italics added)

See the argument given above in §9 and Figures 1B and 3, and col. 3. lines 5-8 of Lewis.

14. Applicant asserts on page 7:

The Examiner goes on to argue that one of the voice terminals 154, 158 receives an original test voice sample and that this reads onto Applicant's claim 1 step (i) of, at the first node, receiving packets for the voice call. This is not the case because the voice terminal in Lewis is receiving test voice samples, not packets for an *actual voice call*. (Italics added)

See §6, above.

15. Applicant further asserts on page 7:

The Examiner also states that Lewis discloses step (iii) of Applicant's claim 1 which specifies that at the second node a comparison is made using a speech quality assessment algorithm. This is not the case because in Lewis the VQPE carries out a comparison. *The VQPE is not the second node because the Examiner argues that is the second voice terminal*. (Italics added)

As can be see in Fig. 1B of Lewis, the voice terminals represent nodes on a packet data network, and after a voice signal is transmitted through the network the now modified voice signal is compared with the original signal to determine the performance of the transmission path (Lewis, column 3, lines 5-10).

16. Applicant asserts on page 7:

Tschudin describes a method of making communications confidential by hiding or embedding those communications in other "dummy" data. That is

Tschudin describes a method to provide confidentially without encryption, by introducing "chaff" (fake packets) into the true packet sequence (the "wheat"). These packets are introduced based on a pseudo random sequence, with this sequence known only to the sender and the receiver. These packets are not tagged in a real sense, but identifiable via the pseudo random sequence (this could only be considered virtual tagging).

Tschudin states "this packet stream can be 'enriched' with fake or *unrelated packets*" (italics added) (p. 316, "Introduction"), which does not preclude the use of voice packets as the unrelated data. Furthermore, Tschudin states "[i]n our approach we also mark all data packets at the sender side with tags to let the intended receiver recognize that packets contain valid data," where the valid tagged data would correspond to the test data (§1. Introduction, ¶2).

17. Applicant asserts beginning on page 7:

Lewis does not teach providing each node or terminal with the same stored test voice information and sending test data and voice data embedded together on the same call. There is nothing in Lewis to direct the skilled person to modify Lewis to provide those features. That is, starting from Lewis, the skilled person has a voice quality performance evaluator for assessing the performance of a mobile unit or a communications network. There is nothing in Lewis to have made the skilled person want to do anything different from Lewis. Lewis does not recognize the problems that dedicated test calls give rise to in contrast to the present application, which recognizes and is specifically concerned with these problems.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

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references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine the (i.e. to make the evaluation process ongoing, as given in the rejection of claim 1, above) would be knowledge generally available to one of ordinary skill in the art).

18. Applicant asserts on page 8:

Claims 4 9 10, 22 and 23 as allegedly being unpatentable over Lewis in view of Tschudin and well known prior art.

The Examiner's arguments here rely on the assumption that the independent claims from which these claims depend are not patentable over Lewis in view of Tschudin. However, this is not the case for the reasons given above. There is no motivation for the skilled person to modify Lewis, let alone to modify Lewis by adding features from Tschudin, providing each node with stored test voice information and also, making additional modifications that the Examiner alleges are well known in the art. No evidence is provided by the Examiner that such features were in fact well known in the art at the time of the invention.

The Examiner has argued that the rejections of the independent claims are upheld. In addition, it is noted that the Applicant's failure to adequately traverse the Examiner's taking of Official Notice after the first office action is taken as an admission of the fact(s) noticed.

19. Applicant asserts on page 9:

Claims 2, 5 and 15 as allegedly being unpatentable over Lewis in view of Tschudin and further in view of Petitcolas.

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Claims 2 and 15 are directed to an embodiment of the invention in which silent periods during a voice call are identified and test voice information is added to the voice call packets during these silent periods. This is advantageous because a live voice call is not disrupted or otherwise adversely affected by addition of the test voice information. (See page 6 paragraph 4 of the specification.) The Examiner acknowledges that neither Lewis nor Tschudin describe this feature. The Examiner contends that the concept of identifying packets where speech is absent is consistent with the technique of identifying residual bandwidth for the purpose of storing hidden information there, as taught by Petitcolas. However, this is not the case. The aim in the present invention is to send test voice information as part of an ongoing voice call in order that both types of information experience the same effects. Petitcolas is concerned with information hiding for confidentiality and security. The skilled artisan would not have been motivated to consider Petitcolas because of this. Also, page 1067 section D of Petitcolas that the Examiner directs one to describes adding information to be hidden to a cover object or image. The added information must necessarily disrupt the cover object or image to some extent. This is not the case in the present invention where test information is only added during "silent periods" specifically with the aim of not disrupting the voice call. For these reasons, even if the skilled person had combined Lewis, Tschudin and Petitcolas he would not have reached the present invention as specified in claims 2 and 15.

Petitcolas states: "The embedded data are the message that one wishes to send secretly. It is usually hidden in an innocuous message referred to as a cover text . . . or cover audio as appropriate" (p. 1063, §II, ¶2) Where the notion of "embedded data" does not preclude "test data." In addition, Petitcolas teaches several techniques for "Spreading the Hidden Information" (p. 1067, §D), which includes the use of "residual bandwidth"

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

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references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Petitcolas teaches a technique of combining two data types, each with a different intended purpose ("innocuous message" and "secret message" §2, ¶12), which corresponds to the Applicant's two data types ("voice" and "test voice data"), where Petitcolas teaches an efficient technique for making such a combination.

20. Applicant asserts on page 10:

Claim 6 as allegedly being unpatentable over Lewis in view of Tschudin and Petitcolas and further in view of well known prior art.

The Examiner's arguments here rely on the assumption that the independent claim from which claim 6 depends is not patentable over Lewis in view of Tschudin. However, this is not the case for the reasons given above.

The Examiner has argued that the rejection of the claim that claim 6 depends upon is upheld. In addition, it is noted that the Applicant's failure to adequately traverse the Examiner's taking of Official Notice after the first office action is taken as an admission of the fact(s) noticed.

21. Applicant further asserts on page 10:

In addition, it is submitted that the skilled person would not have been able to combine as many as four independent pieces of information as proposed by the Examiner without some degree of ingenuity and inventiveness, even if he had been motivated to do so, which is not the case and not explained by the Examiner. The Examiner has used perfect

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hindsight, employing the present invention as the means of mosaicing the prior art. That, of course, is improper.

In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

22. Applicant further asserts on page 10:

Claim 12 as allegedly being unpatentable over Lewis in view of Tschudin and Petitcolas.

Claim 12 is dependent on claim 11 and claim 11 is patentable over Lewis for the reasons given above. The feature of claim 12 is similar to that of claims 2 and 15 and therefore the arguments made above in connection with claims 2 and 15 also apply here. For these reasons claim 12 is patentable.

The Examiner has argued that the rejection of the claim that claim 12 depends upon is upheld. In addition, it is noted that the Applicant's failure to adequately traverse the Examiner's taking of Official Notice after the first office action is taken as an admission of the fact(s) noticed.

23. Applicant further asserts on page 10:

Claim 13 as allegedly being unpatentable over Lewis in view of well known prior art.

Claim 13 is dependent on claim 11, which is patentable over Lewis for the reasons given above. Therefore claim 13 is patentable.

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The Examiner has argued that the rejection of the claim that claim 12 depends upon is upheld. In addition, it is noted that the Applicant's failure to adequately traverse the Examiner's taking of Official Notice after the first office action is taken as an admission of the fact(s) noticed.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

V. Paul Harper
December 31, 2002

Conferees
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